

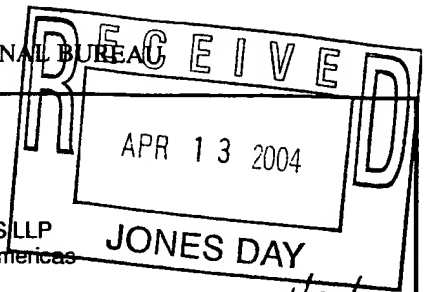
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(54) Title: COMPOSITIONS AND METHODS FOR DETERMINING SUSCEPTIBILITY OF HEPATITIS C VIRUS TO ANTI-VIRAL DRUGS

(57) Abstract: The present invention provides methods for determining the susceptibility of a pathogenic flavivirus to anti-viral compounds. This invention also provides methods for determining anti-viral drug susceptibility in a patient infected with a flavivirus. This invention also provides a method for evaluating the biological effectiveness of a candidate anti-viral drug compound. The methods are useful for identifying effective drug regimens for the treatment of flaviviral infections, and identifying and assessing the biological effectiveness of potential therapeutic compounds. Compositions including resistance test vectors and host cells transformed with the resistance test vectors are provided.

INTERNATIONAL SEARCH REPORT

International application No.

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IPC(7) : C12Q 1/68, 1/70; C12N 15/51 US CL : 435/6, 5, 320.1		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) U.S. : 435/6, 5, 320.1		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WEST, Dialog		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99/06597 A1 (VIROLOGIC, INC.) 11 February 1999 (11.02.99), see entire document.	1-20
X	US 6,242,187 B1 (CAPON et al.) 05 June 2001, see entire document, especially Fig. 15-23; column 13, line 58-column 14, line 31; column 18, line 14-column 19, line 18; Examples 1-8.	1-20
X	US 2002/0034732 A1 (CAPON et al.) 21 March 2002 (21.03.02), see entire document.	1-20
Y	US 5,874,565 A (RICE et al.) 23 February 1999 (23.02.99), see entire document, especially column 5, line 12-column 6, line 60.	1-20
Y	BLIGHT, K.J. et al. Efficient Initiation of HCV RNA Replication in Cell Culture. Science. December 2000, Vol. 290, pages 1972-1974, see entire document.	1-20
Y	CHUNG, R.T. et al. Hepatitis C virus replication is directly inhibited by IFN-alpha in a full-length binary expression system. PNAS. 14 August 2001, Vol. 98, No. 17, pages 9847-9852, see entire document.	1-20
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230		Authorized officer Donna C. Wortman, Ph.D. Telephone No. 703-308-0196